

STATEMENT
OF
LORI MOORE-MERRELL, DrPH, MPH
U.S. FIRE ADMINISTRATOR
FEDERAL EMERGENCY MANAGEMENT AGENCY
U.S. DEPARTMENT OF HOMELAND SECURITY
BEFORE
THE
COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS
U.S. SENATE
WASHINGTON, D.C.

“A Nation on Fire: Responding to the Increasing Wildfire Threat”

Submitted
By

Federal Emergency Management Agency
500 C Street SW
Washington, D.C. 20472
March 14, 2024

Chairman Peters, Ranking Member Paul, and Members of the Committee: My name is Lori Moore-Merrell and I serve as the Administrator of the United States Fire Administration (USFA) within the Federal Emergency Management Agency (FEMA). Thank you for the opportunity to testify today and to discuss the continuous and evolving wildfire threats to the nation.

The USFA's mission is to support and strengthen fire and emergency medical services (EMS) to prevent and respond to all hazards. Strengthening the preparedness and resilience of the nation against fire events is a vital aspect of this responsibility. Since 1974, the USFA has led national efforts to reduce impacts of fire and other disasters in our communities through education, building codes and standards, fire safety advocacy, data collection, research, and grants. Yet, there is much more to do as the wildfire crisis continues to grow, with severe and catastrophic wildfires devastating communities and threatening lives and livelihoods across the nation.

Before we can effectively examine the impact of wildfire on the nation, however, we must first clarify our terminology. Historically, there has been a propensity for Federal decision makers to refer to wildland fire in laws intended to reduce the impact of fire on communities. To clarify, wildland is a location made up of vegetation, while Wildland Urban Interface (WUI) or Wildland Intermix Communities (collectively "the interface") are areas where human development meets or intermingles with undeveloped wildland and vegetative fuels that are both fire-dependent and fire-prone. Suburban communities are largely structural, often with ample vegetative and structural fuel to enable rapid fire spread and suburban conflagration. Ultimately, this confusion in terminology has led to limited resources in the built environment to address the threat of fire before it occurs.

The expansion of our communities into new locations also contributes to the risks we face. Today, 99 million people, or a third of the U.S. population, live in the interface environment, yet many have little or no idea what the interface is, the dangers it poses, how they can reduce their risk of wildfire impacts on their property, or what to do if they need to evacuate, according to a 2018 Proceedings of the National Academy of Sciences article. It is imperative that states and local officials adopt, implement, and enforce the national wildland urban interface building code.

Throughout much of the United States and globally, wildfires are growing in intensity, size, and destructiveness. When wildfire enters the interface, the effects on communities can be catastrophic, including overwhelmed response capabilities, tragic loss of life, disastrous property loss, and socioeconomic devastation. The threat of catastrophic wildfire in America's interface and suburban communities demand national attention and a unified approach. Current approaches to wildfire mitigation and management do not match the scale of the issue.

The Wildland Fire Mitigation and Management Commission

In response to these challenges, the Department of Homeland Security, FEMA, the U.S. Fire Administration, the U.S. Department of Agriculture's Forest Service, and the Department of the Interior were directed by Congress through the Bipartisan Infrastructure Law to lead the Wildland Fire Mitigation and Management Commission. The Wildland Fire (or Wildfire) Mitigation and Management Commission was charged with recommending improvements to how Federal agencies manage wildfire across the landscape.

To quote an opening statement in the Commission’s final report, “The wildfire crisis in the United States is urgent, severe, and far reaching. Wildfire is no longer simply a land management problem, nor is it isolated to certain regions or geographies. Across this nation, increasingly destructive wildfires are posing ever-greater threats to human lives, livelihoods, and public safety. Further, the drivers of the wildfire crisis are numerous and complex, and themselves are influenced by multiple forces and factors at all scales. Despite widespread recognition of this crisis and decades of concerted action, wildfire impacts continue to mount.”

The report itself makes 148 recommendations covering several key themes, to include putting significantly more focus and resources toward proactive pre-fire and post-fire planning to break the current cycle of increasingly severe wildfire risk, damages, and losses. The Commission specifically included several recommendations for investments in resilience across the nation as a critical focus to reduce fire spread risks and the overall impacts of wildfire on communities and support effective evacuation communication and planning. The Commission also recommends supporting and expanding the workforce, including increasing the number of firefighters in the Forest Service and Department of Interior. The Commission stated that Federal investment is urgently needed to create a cross-trained year-round workforce, consisting of both local structural firefighters and state and Federal wildland firefighters, focused on risk reduction, fuels mitigation, preparedness, prevention, and resilient communities, and inclusive of strategies for recruitment and retention. Another theme of the report was modernizing tools for informed decision-making including several measures that would better coordinate, integrate, and strategically align fire-related science, data, and technology. The recommended establishment of a Fire Environment Center, for comprehensive analysis and prediction of the fire environment across the continuum of the fire lifecycle, and the USFA efforts on the new National Emergency Incident Reporting System (NERIS) are some of the initiatives at the heart of these science and data modernization efforts.

A major Commission recommendation for USFA is that the United States Fire Administration provide expanded community-based wildfire training and engagement of the nation’s non-Federal fire service, promote fire-adapted communities to build community resilience, and improve coordination with wildland fire management in the interface. These recommended actions would have been particularly valuable to address the Lahaina, Maui community before the fire. The USFA is now working to implement this recommendation and how we can reprioritize necessary resources.

Lahaina, Maui Wildfires

I accompanied the FEMA Administrator to Lahaina, Maui immediately following the August 8, 2023, fire. My overall focus on the ground was to get a firsthand look at indications of how the fire moved, the likely wind impact, the fuel load that enabled rapid and extensive spread, indications of human behavior during evacuation, and overall firefighter well-being. Following the initial visit, I have remained in communication with the Maui County fire chief and emergency manager as recovery continues. I made a second visit in November 2023 to review the harvesting, de-energization, crushing, and preparation for shipping of lithium-ion batteries recovered from the fire area.

USFA's focus is now on the postfire mitigation opportunities through the FEMA Mitigation Assessment Team (MAT) and increasing resilience during the build-back in Lahaina. In coordination with FEMA Building Sciences, USFA subject matter experts participated in pre-mitigation assessment that revealed indicators of hurricane wind impact, drought, high temperatures, invasive grasses, lack of interface building code adoption, resource constrained infrastructure and services, and an overall lack of planning for a suburban conflagration or community-based wildfire.

To assist with building resilience, USFA, in collaboration with DHS Science and Technology, is deploying several wildfire sensors on Maui and on several other fire prone islands in the state. These sensors, in the second phase of testing, will enhance 'Warnings' and 'Alerts' notifications, enable the deployment of mobile sensors for post burn monitoring, and enable integration testing with mass notification systems and the Integrated Public Alert and Warning System (IPAWS).

Wildfire Response

Sensory technology is a critical part of an effective wildfire response, providing real-time, accurate information about fires as early as possible post ignition so that resources can be quickly deployed and engaged in suppression. However, we also need continual investments and updates to existing wildfire models to adequately predict fire behavior under extreme conditions and within the built environment of the interface and in suburban communities, as well as additional training for firefighters responding to these events.

The increasing incidence of wildfires that affect communities means that more municipal fire departments are responsible for firefighting in the wildland and interface. Structural firefighters, accustomed to fighting one structure fire at a time, are now being confronted with multiple structures burning simultaneously, as well as structure to structure fire transmission. They must react and respond with uncharacteristic tactics and strategies to successfully mitigate the event by reducing or eliminating fire spread. Without specific training, firefighters use traditional firefighting tactics, increasing their risks as they face rapidly moving wildfires. They can be cut off from egress, loose apparatus that are unable to exit from closed off cul-de-sacs or be forced to abandon dry hose lines during the fight. The reality is that they must add interface and suburban conflagration wildfire strategies and tactics to their operational skillset. However, nearly half of the departments that perform these operations indicated that their training does not include specialized interface firefighting operations training.

Lastly, fire departments cannot safely and effectively respond to wildland or interface fires without proper personal protective equipment (PPE). Two-thirds of departments responding to these events use their structural firefighting gear and have unmet needs for wildland and interface PPE for all firefighters. Research, innovation, and standards for respirators purpose-fit for wildland and interface firefighting, as well as PPE specifically designed for female firefighters, are urgently needed. There are significant risks associated with ill-fitting PPE because firefighters are not able to move as easily or as quickly as they need to during an emergency response.

Overarching Goal

The USFA, along with Federal, state, and local partners, is actively participating in preparedness, including community risk reduction, where we are engaging with individual communities through fire stop tours across the nation. We are teaching individuals to make their home fire safe by reducing vegetation around their home, using fire resistant materials to build or replace fences and decks, and making themselves savable by knowing the way out if told to evacuate. USFA is also engaged in preparing structural firefighter training for interface response, developing wildfire operational evacuation standards and exercises, and supporting community resilience through continued research and building code advocacy. It is our goal to prepare all local structural firefighters and communities for the increase in wildfires in the interface and in rural and suburban communities.

As we anticipate challenges ahead, FEMA and USFA looks forward to working with the Members of this Committee to build a more resilient nation. Thank you for the opportunity to testify. I look forward to answering your questions.